CONTENTS

Volume 13, Issue Nos. 1–6

International Journal for

NUMERICAL AND ANALYTICAL METHODS
IN GEOMECHANICS

*Issue No.* 1, January–February 1989

Erratum . . . . . ii

Numerical Simulation of Secondary Consolidation of Soil: Finite Element Application: R. W. Lewis and D. V. Tran . . . . . 1

An Assessment of the Bearing Capacity of Calcareous and Silica Sands: S. K. Yeung and J. P. Carter . . . . . 19

Pollutant Migration from Deeply Buried Repositories: M. S. Rahman and J. R. Booker 37

Finite Element Analysis of Strain Localization in Frictional Materials: Y. Leroy and M. Ortiz . . . . . 53

Consolidation Around a Heat Source Buried Deep in a Porous Thermoelastic Medium with Anisotropic Flow Properties: C. Savvidou and J. R. Booker . . . . . 75

SHORT COMMUNICATION . . . . .

Simplifications to the Bounding Surface Model for Cohesive Soils: V. N. Kaliakin and Y. F. Dafalias . . . . . 91

LETTERS TO THE EDITOR . . . . . 101

BOOK REVIEW . . . . . 108

CONFERENCE DIARY . . . . . 109

ANNOUNCEMENTS . . . . . 113

Indexed or abstracted by 'Abstract Jnl in Earthquake Engineering', 'Applied Mechanics Review', 'Cambridge Scientific Abstracts', 'CITIS-Civil Engineering Abstracts', 'Current Contents', 'Engineering Index', 'Eng. Societies Library', 'Fiz Energia', 'Geotechnical Abstracts', 'Geo Abstracts', 'Geodex', 'Georef', 'Indian Society of Earthquake Technology', 'INSPEC', 'International Petroleum Abstracts', 'Mathematical Reviews', 'Mechanics', 'Newsletter of Eng Analysis Software', 'Shock & Vibration Digest', 'VINITI-USSR Acad. of Science', 'Zentrablatt fur Mathematik'.

*Issue No.* 2, March–April 1989

A Numerical and Laboratory Investigation into the Behaviour of a Dry Underclay Beam: A. Afrouz and F. P. Hassani . . . . . 115

The Key Blocks of Unrolled Joint Traces in Developed Maps of Tunnel Walls: G.-H. Shi and R. E. Goodman . . . . . 131

The Influence of a Boundary Fracture on the Elastic Stiffness of a Deeply Embedded Anchor Plate: A. P. S. Selvadurai . . . . . 159

Modelling of Concrete Response to Fluctuating Load: J. Jiang and S. Pietruszczak . 171

Bifurcation Analysis of Deep Boreholes: II. Scale Effect: P. C. Papanastasiou and I. G. Vardoulakis . . . . . 183

APPLICATION BRIEF

Fracture Toughness of Geomaterials: H. J. Siriwardane and A. W. Layne . . . . . 199

SHORT COMMUNICATIONS

Use of the Finite Element Method in Modelling a Static Earth Pressure Problem: S. K. Bhatia and R. M. Bakeer . . . . . 207

A Two-dimensional Poroelastic Displacement Discontinuity Method for Hydraulic Fracture Simulation: L. Vandamme, E. Detournay and A. H.-D. Cheng . . . . . 215

CONFERENCE DIARY . . . . . 225

*Issue No.* 3, May–June 1989

Numerical Simulation of Excavation in Elasto-plastic Soils: R. I. Borja, S. R. Lee and R. B. Seed . . . . . 231

On Cryer's Problem with Large Displacements: R. E. Gibson, A. Gobert and R. L. Schiffman . . . . . 251

Upper Bound Limit Analysis using Finite Elements and Linear Programming: S. W. Sloan . . . . . 263

Boundary Integral Analysis of Transient Thermoelasticity: D. W. Smith and J. R. Booker 283

On Hypo-elastic Analogues of the Dilatant Double-sliding Model: N. P. Kruyt . . . 303

Performance of Flexible Retaining Walls Supporting Dry Cohesionless Soils under Cyclic Loads: R. Siddharthan and E. M. Maragakis . . . . . 309

APPLICATION BRIEF
Undrained and Partially Drained Behaviour of End Bearing Piles and Bells Founded in Untreated Calcarenite: J. D. Murff . . . . . 327

SHORT COMMUNICATION
The Effect of Poisson's Ratio and the Far-field Boundary Conditions on the Accuracy of Finite Element Calculations: M. E. Duncan Fama . . . . . 331

BOOK REVIEW . . . . . 339

CONFERENCE DIARY . . . . . 341

ANNOUNCEMENT . . . . . 346

*Issue No.* 4, July–August 1989

Seismic Earth Thrust Against Massive Building Walls: C. Navarro and A. Samartín . 347

Generalization of Two-dimensional Discontinuous Deformation Analysis for Forward Modelling: G.-H. Shi and R. E. Goodman . . . . . 359

Kinematic (or Hour-glass) Mode Control for a Uniform Strain Quadrilateral by an Assumed Strain Technique: N. C. Last and R. M. Harkness . . . . . 381

Thermal Stress Analysis of Underground Openings: P. Kumar and B. Singh . . . 411

APPLICATION BRIEF
Numerical Analysis of Anchors in Soils: H. J. Siriwardane . . . . . 427

TECHNICAL NOTE ON PRACTICAL APPLICATIONS
Effect of a Shear Seam in the Foundation of Karjan Dam: A. Varadarajan and K. G. Sharma. . . . . 435

SHORT COMMUNICATION
Free Convection along a Vertical Wall in a Porous Medium with Periodic Permeability Variation: P. Singh, J. K. Misra and K. A. Narayan . . . . . 443

CONFERENCE DIARY . . . . . 451

ANNOUNCEMENTS . . . . . 457

*Issue No.* 5, September–October 1989

Elastic–Plastic Response of a Circular Hole to Repeated Loading: P. E. Senseny, H. E. Lindberg and L. E. Schwer . . . . . 459

Pore Pressure Predictions in Finite Element Analysis: M. P. Pacheco, A. G. Altschaeffl and J.-L. Chameau . . . . . 477

Deformation Analysis of Sands in Cubical and Hollow Cylinder Devices: C. S. Chang, A. Misra and S. P. Weeraratne . . . . . 493

Mechanics of a Sandy Subsoil Subjected to Cyclic Loadings: A. Sawicki and W. Swidzinski . . . . . 511

A Semi-analytic Model for Contaminant Migration in a Regular Two- or Three-dimensional Fractured Network: Conservative Contaminants: R. K. Rowe and J. R. Booker 531

Strain-path Analyses for Arbitrary Three-dimensional Penetrometers: A.-B. Huang 551

SHORT COMMUNICATION
Finite Element Analysis of Underground Openings: S. K. Sharan . . . . . 565

CONFERENCE DIARY . . . . . 571

*Issue No.* 6, November–December 1989

An Expression for the Permeability of Anisotropic Granular Media: N. J. Meegoda, I. P. King and K. Arulanandan . . . . . 575

System Analysis in Calculation of Cantilever Retaining Walls: E. Dembicki and T. Chi 599

Thin Flow Element and the Problem of ill-conditioning: S. Valliappan, N. Khalili-Naghadeh and V. Murti . . . . . 611

Initial Moduli of Particulated Mass with Frictional Contacts: C. S. Chang, S. S. Sundaram and A. Misra . . . . . 629

Boundary Element Approach to the Dynamic Stiffness Functions of Circular Foundations: E. Alarcon, J. J. Cano and J. Dominguez . . . . . 645

TECHNICAL NOTES ON PRACTICAL APPLICATIONS
Earth Pressure Behind a Gravity Retaining Wall: R. M. Bakeer and S. K. Bhatia . . 665

BOOK REVIEW . . . . . 675

CONFERENCE DIARY . . . . . 677

Author Index . . . . . 681